

Claims

What is claimed is:

- 1 1. A dried paste composition comprising freeze-dried DBM particles and a
2 carrier, wherein said carrier is gelatin, hyaluronic acid, polyethylene oxide,
3 polyvinylpyrrolidone, polyvinyl alcohol, collagen or dextran, or
4 combinations thereof.
- 1 2. The dried paste composition of claim 1, wherein said carrier is also dried.
- 1 3. The dried paste composition of claim 1, wherein said freeze-dried DBM
2 particles are about 125 microns to about 850 microns in size.
- 1 4. The dried paste composition of claim 3, wherein said freeze-dried DBM
2 particles are about 250 microns to about 500 microns in size.
- 1 5. The dried paste composition of claim 1, wherein said carrier is gelatin.
- 1 6. The dried paste composition of claim 5, wherein said gelatin is in the form of
2 granules having a size of about 125 microns to about 710 microns.
- 1 7. The dried paste composition of claim 6, wherein said gelatin is in the form of
2 granules having a size of about 500 microns to about 710 microns.
- 1 8. The paste composition of claim 1, further comprising antibiotics; or sucrose,
2 dextrose or other biologically compatible anti-caking agents; or combinations
3 thereof.
- 1 9. The paste composition of claim 1, further comprising barium, iodine, or other
2 radioopaque substances, or combinations thereof.

- 1 10. The paste composition of claim 1, further comprising an exothermic
2 substance.
- 1 11. The paste composition of claim 10, wherein said exothermic salt comprises
2 Magnesium chloride, Sodium sulfate, or Magnesium sulfate or other
3 exothermic salts, or combinations thereof.
- 1 12. A reconstituted paste composition comprising an admixture of a dried paste
2 composition comprising freeze-dried DBM particles and a carrier, wherein
3 said carrier is gelatin, hyaluronic acid, polyethylene oxide,
4 polyvinylpyrrolidone, polyvinyl alcohol, collagen or dextran, or
5 combinations thereof; and
6 reconstitution fluid, wherein said reconstitution fluid is selected from the
7 group consisting of water, water-based salines, blood or fractions thereof,
8 protein solutions, gelatin solutions, growth factor solutions, antibiotic
9 solutions, analgesic solutions, platelet rich plasma, crude platelet extract, and
10 combinations thereof.
- 1 13. A reconstituted paste composition comprising an admixture of a dried paste
2 composition comprising freeze-dried DBM particles and gelatin; and
3 reconstitution fluid, wherein said reconstitution fluid comprises water.
- 1 14. An article of manufacture comprising a container having the dried paste
2 composition of claim 1 disposed therein.
- 1 15. The article of manufacture of claim 14, wherein said container is a syringe.
- 1 16. A dried paste composition comprising freeze-dried DBM particles and
2 gelatin, wherein the DBM particles are about 250 microns to about 500
3 microns in size.

- 1 17. A method of treating a bone defect or injury comprising reconstituting the
2 dried paste composition of claim 1 with a reconstitution fluid to form a paste
3 composition, wherein said reconstitution fluid is selected from the group
4 consisting of water, water-based salines, blood or fractions thereof, protein
5 solutions, gelatin solutions, growth factor solutions, antibiotic solutions,
6 analgesic solutions, platelet rich plasma, crude platelet extract, and
7 combinations thereof; and administering the paste composition to a site of
8 need.
- 1 18. The dried paste composition of claim 1, wherein said dried bone paste is
2 stored at room temperature for more than about 24 hours, and which is
3 reconstituted to form a reconstituted paste composition prior to administration,
4 whereby upon reconstitution said reconstituted paste composition is
5 osteogenic, chondrogenic, or chondroprotective, or a combination thereof.
- 1 19. A dried paste composition comprising freeze-dried DBM particles and a
2 carrier, wherein said carrier is gelatin, hyaluronic acid, chondroitin sulfate,
3 polyethylene oxide, polyvinylpyrrolidone, polyvinyl alcohol, collagen or
4 dextran, or combinations thereof, wherein said dried paste composition is
5 stored at room temperature for more than about 24 hours, and wherein said
6 dried paste composition is osteogenic, chondrogenic, or chondroprotective or
7 a combination thereof upon reconstitution.
- 1 20. A dried paste composition capable of being stored at room temperature and
2 upon reconstitution, possesses osteogenic, chondrogenic, or
3 chondroprotective properties, or a combination thereof. .